Amendments to the Claims

Please amend the pending claims as follows:

1. (currently amended) An X-ray imaging apparatus comprising:

<u>a plurality of X-ray tubes comprising a first X-ray tube production means</u> for producing X-rays from a plurality of sources <u>and a second X-ray tube for producing X-rays from a plurality of sources</u> wherein the <u>first X-ray tube and second X-ray tube are adjacent each other and sources are</u> spaced from each other by a <u>source</u> spacing;

a plurality of X-ray sensors to detect X-rays emitted from the <u>plurality of X-ray</u> tubes sources and passed passing through an object; and

control means for controlling the <u>an</u> order in which the <u>X-ray tubes</u> sources are active such that the average smallest <u>a</u> displacement between an active <u>X-ray tube</u> source in one emission period and an active <u>X-ray tube</u> source in a period immediately after the <u>emission</u> the subsequent period is greater than the source spacing.

- 2. (currently amended) The imaging apparatus of claim 1 wherein said average smallest displacement is at least twice the source spacing.
- 3. (currently amended) The imaging apparatus of claim 1 wherein an active X-ray tube source position in said any one emission period is not adjacent a X-ray tube source position that is active in the the next emission period immediately after the emission period.
- 4. (currently amended) The imaging apparatus of claim 1 wherein only one X-ray tube source position is active in each emission period.
- 5. (currently amended) The imaging apparatus of claim 1 wherein a plurality of X-ray tube source position are active simultaneously in each emission period.
- 6. (currently amended) The imaging apparatus of claim 5 wherein each of the X-ray tubes source positions produces X-rays for detection by at least one corresponding group of sensors, wherein during each emission period, the group of sensors are not overlapping.
- 7. (currently amended) The imaging apparatus of claim 6 wherein in each emission period at least half of the sensors are arranged to receive X-rays from the active X-ray tubes source positions.
- 8. (currently amended) The imaging apparatus of claim 7 wherein in each emission period substantially all of the sensors are arranged to receive X-rays from the active X-ray tubes source positions.
- 9. (canceled)
- 10. (canceled)

- 11. (canceled)
- 12. (canceled)
- 13. (canceled)
- 14. (new) An X-ray imaging apparatus comprising:
 - a plurality of X-ray tubes, each of said X-ray tubes comprising a plurality of source positions, including a first source position and a second source position, wherein the first source position and the second source position are adjacent each other and spaced from each other by a source spacing;
 - a plurality of X-ray sensors to detect X-rays emitted from the plurality of X-ray tubes and passed through an object; and
 - a controller for controlling an order in which the X-ray source positions are active such that a displacement between an active source position in one emission period and an active source position in a period immediately after the emission period is greater than the source spacing.
- 15. (new) The imaging apparatus of claim 14 wherein said displacement is at least twice the source spacing.
- 16. (new) The imaging apparatus of claim 14 wherein an active source position in the emission period is not adjacent a source position that is active in the period immediately after the emission period.
- 17. (new) The imaging apparatus of claim 14 wherein only one source position in an X-ray tube is active in each emission period.
- 18. (new) The imaging apparatus of claim 17 wherein a plurality of X-ray tubes are active simultaneously in each emission period.
- 19. (new) The imaging apparatus of claim 14 wherein, in each emission period, more than one source position is active and each of said active source positions is located in a different X-ray tube.
- 20. (new) The imaging apparatus of claim 14 wherein only one source position in each X-ray tube is active in each emission period and each X-ray tube is active in a sequential order.
- 21. (new) The imaging apparatus of claim 14 wherein, within each X-ray tube, an order in which source positions are active is arranged such that, in each emission period, an active source position is not adjacent to a source position that was active in a period immediately preceding the emission period.